Foreword

E-Health describes the application of information and communications technologies (ICT) across the whole range of functions that affect the health sector; from the doctor to the hospital manager, via nurses, data processing specialists, social security administrators and of course the patients. E-Health offers patients important opportunities for improved access to better healthcare systems. It has the potential to empower both patients and healthcare professionals. It offers governments and tax payers a means to substantial productivity gains and to cope with increasing demand on healthcare services. It can also help reshape the future of healthcare delivery, making it more patient-centric.

There are several e-health devices that can be of great benefit for several groups of patients and at the same time reduce treatment costs; still the techniques are rarely used. Data acquired by these devices are of great interest both for making more accurate diagnosis and for scientific studies. E-Health is of great significance for the future healthcare organisations promising the increase in competence and quality whilst reducing the cost.

E-Health promises both today’s substantial productivity gains and tomorrow’s restructured, patient-centred health systems, while respecting the diversity of world’s multi-cultural, multi-lingual healthcare traditions.

E-Health systems include tools for health authorities and professionals as well as personalised health systems for patients and citizens. Examples include health information networks, electronic health records, telemedicine services, personal wearable and portable communicable systems, health portals, and many other ICT based tools assisting disease prevention, diagnosis, treatment, health monitoring and lifestyle management. Telemedicine - the provision of healthcare services at a distance - can help improve the lives of citizens, both patients and healthcare professionals, while tackling the challenges of healthcare systems.

The expertise brought together in the development of this handbook is second to none. This handbook, with contributions from some of the best known and respected proponents of e-health and telemedicine, provides an in-depth coverage of the developments in e-health and telemedicine from both technological and social perspectives. The handbook’s excellent collection includes: e-health enabling technologies, social challenges, opportunities and impact, organisational and business aspects, e-health applications and current development opportunities and future trends.
A book that demonstrates what can be achieved within e-health and telemedicine would have been welcome in itself, but a handbook like this that teaches, gives real insight and inspires those that read it to contribute to the ongoing improvements and successful delivery of e-health and telemedicine services will be a valuable catalyst in all geographies.

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